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### AMENDMENTS

This listing of claims replaces all prior versions and listings of claims in the application.

1           1.       (Currently amended)     A method for filtering a receive signal in a  
2       wireless receiver, comprising:  
3           providing a received signal to an amplifier; and  
4           filtering the received signal using a circuit comprising a single frequency  
5       dependent negative resistance configured to realize a bi-quad filter electrically isolated  
6       from an input of the amplifier such that noise contributed by the filter circuit is blocked  
7       from an output of the amplifier at a first frequency, wherein filtering at the first  
8       frequency is performed ~~by applying via~~ a single voltage-to-current conversion and a  
9       single current-to-voltage conversion.

1           2.       (Currently amended)     The method of claim 1, wherein noise  
2       contributed by the filter circuit is passed to the output of the amplifier only at a  
3       frequency other than the first frequency.

1           3.       (Currently amended)     The method of claim 1, wherein the filter  
2       circuit comprises a frequency dependent negative resistance implemented using a  
3       general impedance converter.

1           4.       (Original)     The method of claim 3, wherein noise generated by the  
2       general impedance converter is blocked from the output of the amplifier at the first  
3       frequency.

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1           5.       (Original)     The method of claim 4, wherein the first frequency is the  
2       in-band receive frequency.

1           6.       (Currently amended)     A low-noise filter for a wireless receiver,  
2       comprising:  
3           an amplifier; and  
4           a filter circuit comprising a single frequency dependent negative resistance  
5       implemented using a general impedance converter to realize a bi-quad filter electrically  
6       isolated from the amplifier input, the circuit configured such that noise generated by the  
7       circuit is prevented from appearing on a received signal at a first frequency, wherein the  
8       amplifier and the frequency dependent negative resistance perform a voltage-to-current  
9       conversion and a current-to-voltage conversion, respectively at a first frequency.

1           7.       (Previously presented)     The low-noise filter of claim 6, wherein the  
2       general impedance converter further comprises:  
3           a pair of operational amplifiers arranged such that a non-inverting input of a first  
4       amplifier is coupled to an inverting input of a second operational amplifier; and  
5           at least one capacitance configured to prevent noise generated by the pair of  
6       operational amplifiers from appearing at an output of the amplifier at the first frequency.

1           8.       (Original)     The low-noise filter of claim 7, wherein the first  
2       frequency is the in-band receive frequency.

1           9.       (Original)     The low-noise filter of claim 8, wherein noise generated  
2       by the pair of operational amplifiers appears at the output of the amplifier at a second  
3       frequency.

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1           10.   (Original)   The low-noise filter of claim 9, wherein the second  
2           frequency is an out-of-band receive frequency.

1           11.   (Currently amended)   A portable transceiver, comprising:  
2           a modulator configured to receive and modulate a data signal;  
3           an upconverter configured to receive the modulated data signal and provide a  
4           radio frequency (RF) signal;  
5           a transmitter configured to transmit the RF signal; and  
6           a direct conversion receiver including an amplifier and a filter, the filter  
7           comprising a single frequency dependent negative resistance implemented using a  
8           general impedance converter to realize a bi-quad filter electrically isolated from the  
9           amplifier input and configured such that noise generated by the filter is prevented from  
10          appearing on a received signal at a first frequency, wherein the amplifier and the  
11          frequency dependent negative resistance perform a single voltage-to-current conversion  
12          and a single current-to-voltage conversion.

1           12.   (Previously presented)   The portable transceiver of claim 11, wherein  
2           the general impedance converter further comprises:  
3           a pair of operational amplifiers arranged such that a non-inverting input of a first  
4           amplifier is coupled to an inverting input of a second operational amplifier; and  
5           at least one capacitance configured to prevent noise generated by the pair of  
6           operational amplifiers from appearing at an output of the amplifier stage at a first  
7           frequency.

1           13.   (Original)   The portable transceiver of claim 12, wherein the first  
2           frequency is the in-band receive frequency.

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1 14. (Original) The portable transceiver of claim 13, wherein noise  
2 generated by the pair of operational amplifiers appears at the output of the amplifier  
3 stage at a second frequency.

1 15. (Original) The portable transceiver of claim 14, wherein the second  
2 frequency is an out-of-band receive frequency.

1 16. (Currently amended) A portable transceiver, comprising:  
2 means for modulating a data signal;  
3 means for upconverting the modulated data signal and provide a radio frequency  
4 (RF) signal;  
5 means for transmitting the RF signal;  
6 means for converting a received signal to a baseband signal; and  
7 means for filtering the baseband signal so that noise generated by the filter  
8 means is prevented from appearing on the received signal at a first frequency, the means  
9 for filtering comprising a single frequency dependent negative resistance configured to  
10 realize a bi-quad filter electrically isolated from an input of the amplifier, wherein the  
11 means for filtering performs a single voltage-to-current conversion and a single current-  
12 to-voltage conversion.

1 17. (Original) The portable transceiver of claim 16, wherein the first  
2 frequency is the in-band receive frequency.

1 18. (Previously presented) The portable transceiver of claim 17, wherein  
2 noise generated by the filter means appears on the received signal at a second frequency.

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1           19.   (Original)   The portable transceiver of claim 18, wherein the second  
2   frequency is the out-of-band receive frequency.

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